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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/027,101

12/20/2001

Richard Vernon Ford

6533/53662

9681

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04/24/2006

LAW OFFICE OF MARK J. SPOLYAR
2200 CESAR CHAVEZ STREET
SUITE 8
SAN FRANCISCO, CA 94124

EXAMINER

CHUNG, JI YONG DAVID

ART UNIT

PAPER NUMBER

2143

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/027,101	FORD, RICHARD VERNON	
	Examiner	Art Unit	
	Ji-Yong D. Chung	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 12/29/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Remarks

1. The applicant's arguments and amendments filed on December 29, 2005 have been carefully considered but they are not deemed fully persuasive.

In the Remarks, the applicant points out the misunderstanding between the applicant and the Office, with respect to "aggregate volume of data transfer." The applicant's explanation is in accord with the Office's current understanding of the claimed subject matter.

In the Remarks, the applicant's first argument is that the "aggregate data transfer" as cited in the claims is not the same thing as "throughput" in Baugher. The applicant states that "the aggregate volume of data transfer refers to the number of bytes transferred over the given time interval corresponding to all flows within a given time interval. Adds the applicant, "as Baugher states, QoS parameters referred to in this section are QoS parameters specified upon initiation of a connection."

The Office disagrees.

Any bandwidth measurement requires counting the number of bytes over a given time interval, even though the time interval maybe a short one. Bytes over a given unit time is the definition of bandwidth use. Therefore, Baugher meets the applicant's definition of "aggregate volume in a time interval."

The fact that QoS parameters are the ones specified upon initiation of a connection makes little difference; there is no limitation in the claim (nor in the specification) that indicates the

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exclusion of the QoS parameters that are measured upon the initiation of a connection or the inclusion only of the parameters that are being measured prior to the connection.

Note that each user in Baugher is a client computer. See Fig. 2, Fig. 4 and claim 1 of Baugher.

The applicant's next argument deals with "detecting" and "affecting" steps in claim 1. The applicant's position is that Baugher does not teach the step in the cited passages. The applicant goes on to say, "Rather the cited passage merely discloses that stations can attempt to reserve bandwidth, de-allocate existing reservations, and coordinate these actions with other stations by accessing the MIB's of other stations. That MIB objects can notify a process when a variable crosses a threshold does not disclose the teaching and detecting steps of the claimed subject matter."

The Office disagrees.

The cited passage cannot be read alone, but it must be read in light of the rest of Baugher disclosure. For the significance of the cited passage, see Fig. 8 and from line 64 in column 10 to line 23 in column 11. As it is apparent from the step 830 in Fig. 8, actual data rate is monitored, and tested against the negotiated rate ("threshold") in the MIB. In other words, a break in the threshold is monitored for detection, to control ("affect") the transmission rate (step 830 in Fig. 8) is detected. See lines 11-13 in column 11.

With regard to **claim 11**, the applicant indicates that Baugher does not disclose a system that allocates bandwidth based on threshold determinations relating to past and current data flows, but based on current loading allocation conditions.

The Office disagrees. Any bandwidth allocation system has means to measure a “data flows.” As noted above, bandwidth measurement requires byte count (“flow”).

Note that any bandwidth measurement is *always* based on past data (whether such measurement is one minute ago, ten minutes ago or twenty minutes ago). This is because in measuring bandwidth, number of bytes must be counted and then divided by the amount of time elapsed.

With respect to **claim 4**, the applicant, in page 13 of Remarks states, “bandwidth refers to a current rate that can be allocated among stations. However, this has no relation to the volume of data transferred to in the claims ... In other words, Baugher allocates bandwidth to a given data flow based on current loading and allocation conditions.”

The applicant mischaracterizes the Baugher’s system. In the first place, a bandwidth measurement entails counting the number of bytes in a given unit of time; the bandwidth measure is thus related to volume.

Secondly, as noted above, a given bandwidth is always measured with past data. No measurement is instantaneous. One may measure bandwidth over the past 1 second, 1 minute, 1 hour or over a whole day.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. **Claims 1-4, 6-7, 11-14, and 16-18** stand rejected under 35 U.S.C. 102(e) as being anticipated by Baugher et al (Baugher hereinafter).

With respect to claims **1-4, 6-7, 11-14 and 16-18**, the ground of rejection in the second Office Action is substantively maintained. The applicant is directed to the prior Office action for the ground of the rejection.

The amendments to the claims (those which have not been discussed in the prior Office action) are briefly discussed.

In **claims 1**, “within a given time interval” has been inserted. As explained above, in Response to Remarks, Baugher’s bandwidth measurement requires counting bytes in a given unit of time. That is the definition of bandwidth. See Fig. 8.

In **claim 11**, “wherein the aggregate volume of data transfer characterizes the volume of data corresponding to past and current data flow over the give time interval” still reads on Baugher. The reason is that bandwidth use measurement entails measuring the volume of data corresponding to past and “current data flow” over a given time interval.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. **Claims 5, 8-10, 15, 19-24, and 27-32** stand rejected under 35 U.S.C. 103(a) as being unpatentable over Baugher in view of Amin et al, (Pub. No. 2002/0152319, Amin hereinafter). Amin incorporates U. S. Pat. No. 6,714,987, to Amin et al (Amin2 hereinafter) by reference.

With respect to claims **5, 8-10, 15, 19-24, and 27-32**, the ground of rejection in the second Office Action is maintained. The applicant is directed to the prior Office action for the ground of the rejection.

The amendments **claims 23 and 24** reflect amendment to claims 1 and 11. The same explanation for maintaining the ground of rejection (in the second Office action) applies.

6. **Claims 25 and 26** stand rejected under 35 U.S.C. 103(a) as being unpatentable over Baugher and Amin as applied to claim 24 above, and further in view of Makuck.

With respect to claims **25 and 26**, the ground of rejection in the second Office Action is maintained. . The applicant is directed to the prior Office action for the ground of the rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Office has found the following to be pertinent:

- (1) Jackowski et al (Pat. No. 6,141,686, Jackowski hereinafter)
- (2) Johnson (Pat. No. 6,820,117)
- (3) Ludovici et al (Pat. No. 6,636,898, Ludovici hereinafter)

Jackowski describes maintaining historical record of transmission flow data, including *byte counts* ("aggregate volume of data transfer within a time interval."). Information collected by the system is used to classify applications that transmitted the packet, in order to control the application data flow.

Johnson describes application level bandwidth management. The system monitors a bandwidth and *byte count* using a system API. See lines 37-49 in column 11. The system also sets byte count threshold.

Ludovici shows a VPN manager which can also control and set byte count and bandwidth threshold. See from line 47-59 in column 3.

Each of the references cited above seems to disclose the claimed feature of monitoring and detecting "aggregate volume of data."

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

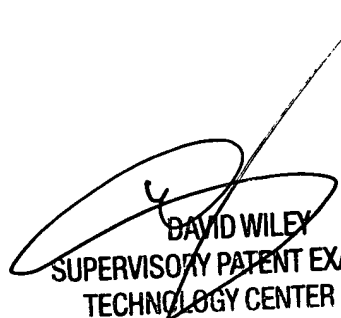
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ji-Yong D. Chung whose telephone number is (571) 272-7988. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ji-Yong D. Chung
Patent Examiner
Art Unit: 2143



DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100